

# Gliders

## Developed/Adapted By

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## One sentence description of the assignment or activity

Students will construct gliders, gather data from test flights, and analyze the linear flight path.

## Course for which this is used

- PreAlgebra (Math 0950)
- Beginning Algebra (Math 0990)
- Intermediate Algebra (Math 1010)
- College Algebra (Math 1050)

## Key topics taught in this activity

Linear equations, slope, centroid

## Prerequisites

Students must have a working knowledge of linear equations in two variables.

## Lesson Plan – Detailed Description

Students first construct their own triangular glider from construction paper, tape, wire, and glue. Then they find the center of gravity (centroid) of their glider and attach a wire hook at that point. Once the gliders are completed, the entire class will test fly the gliders (a height 2 or 3 stories is ideal) placing washers on the hook in order to maximize their distance. They will record the data from their test flights and then complete the assignment sheet.

## Activity Grading/Assessment

The completion of the assignment and participation in class during the activity will all contribute to their grade.

## Class Time Required

65 minutes (30 minutes to build the gliders and 35+ minutes to test fly each of the gliders).

## Out-of-Class Time Required

None

## Materials Required

Construction paper  
Tape  
Wire  
Glue  
Any other construction materials you deem appropriate  
50-100 foot measuring tape to measure glider flights  
Assignment sheet  
Pencil

## Supplemental Web Resources

<http://adventure.howstuffworks.com/hang-gliding.htm>